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09/476,761	01/03/2000	RICHARD G. MILLER	19223-000100	8273

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EXAMINER

MONESTIME, MACKLY

ART UNIT

PAPER NUMBER

2671

DATE MAILED: 04/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

idG

Office Action Summary

Application No.

09/476,761

Applicant(s)

Miller et al

Examiner

Hickly Honestone

Group Art Unit

2671

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 1/24/02
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-25 ~~is/are~~ pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-25 ~~is/are~~ rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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Response to Amendment

1. The amendment received on January 24, 2002 has entered and carefully considered.

Claims 1-23 and newly added claims 24-26 are still pending in the application.

Claim Rejections - 35 U.S.C. § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 12, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al US Patent No. 5,847,771) in view of Uenoyama et al (US Patent No. 5,982,432).

4. Cloutier et al was cited in the last office action.

5. As per claims 1, 12 and 21, Cloutier et al substantially disclosed the invention as claimed, including a media processing system (Fig. 3, Item No. 76) comprising: DRAM (col. 13, lines 61-63) having plurality of storage locations for storing digital data being processed by said media processing system (Fig. 3, Items No. 80a-80b; col. 13, lines 61-63), said digital data including video data that is compressed in a standardized format; means for processing said digital data that includes said standardized format compressed video data to produce compressed video images and image data (col. 14, lines 66-67); means for decoding said standardized format compressed video images to generate full motion video pixel data; means for sharing DRAM between

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processing means and said decoding means (col. 2, lines 49-63; col. 3, lines 9-15; col. 13, lines 45-54). Cloutier et al. did not specifically disclose means for producing a full motion video signal from said full motion video pixel data. However, Cloutier et al. did disclose the use of MPEG in his system. As well known to those of ordinary skill in this technology, MPEG processing provides compression coding of up to 30 frames per second of full motion video signals along with a corresponding high quality sound signal, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the MPEG taught by Cloutier et al. to provide a full motion video signal from a full motion video pixel data.

Cloutier et al did not disclose means for decoding the first standardized format compressed video images is adapted for reconfigured to decode digital data including that is compressed in a second standardized format. However, Uenoyama et al disclose a picture conversion apparatus in which digital picture signals compressed in a first format into a plurality of digital picture signals compressed in a second format different from the first format (col. 103, lines 55-60). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the cited references because they are all directed from the same field of endeavor. One of ordinary skilled in the graphics art would have been motivated to do so because such features would provide a picture providing system for providing digital picture signals compressed according to a compression format requested by the user.

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6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al. in view of Uenoyama et al as applied to claim 1 above, and in further in view of Lucas et al. (US Patent No. 5,081,450).

7. Lucas was cited in the last office action.

8. As per claim 2, the combination failed to disclose: standardized compressed format comprises a luminance sampled generated for each pixel and two chrominance samples generated for every four pixels. However, Lucas et al. disclosed standardized compressed format comprises a luminance sampled generated for each pixel and two chrominance samples generated for every four pixels (col. 6, lines 40 and 50-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Lucas et al. with the teachings of Cloutier et al and Uenoyama et al because doing so would provide a lower transmission bandwidth and a lower data storage requirement.

9. As per claim 3, Cloutier et al. disclosed: said decoded means comprises a Motion Picture Expert Group decoder (col. 2, lines 22-23).

10. Claims 4-7, 13-16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al in view of Uenoyama et al as applied to claims 1, 12 and 21 above, and further in view of Keene et al. (US Patent No. 5,510,843).

11. Keene et al was cited in the last office action.

12. As per claims 4-7, 13-16 and 23, the combination failed to disclose: wherein said compressed video data comprises a plurality of pixels and said processing means comprises means

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for combining a first pixel with a second pixel in a single clock cycle. However, Keene et al. disclosed the steps of combining a first pixel with a second pixel (col. 4, lines 54-59); but Keene did not specifically disclose that the combination has been performed in a single clock cycle. As well known in the computer art the clock of a computer is one of the prime determinants of its overall processing speed. Moreover, in computer graphics, the display cycle time is the minimum time interval between the starts of successive display cycles. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Keene et al. with the teachings of Cloutier et al and Uenoyama et al because doing so would enhance the overall processing speed of the system by combining a first and a second pixel in one clock cycle.

13. Claims 8-10 and 17-19 rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al. in view of Uenoyama et al as applied to claims 1, 12 and 21 above, and further in view of Ohki (US Patent No. 5,838,985).

14. Ohki was cited in the last office action.

15. As per claims 8-9 and 17-18, the combination failed to disclose a plurality of processing elements connected together in parallel, means for controlling said processing elements with instruction words that have a predetermined number of instructions, and means for distributing data simultaneously to each of said processing elements. However, Ohki disclosed a plurality of processing elements connected together in parallel (col. 3, line 9), means for controlling said processing elements with instruction words that have a predetermined number of instructions, and means for distributing data simultaneously to each of said processing elements (col. 3, line 9-21).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have included the processing elements as taught by Ohki into the system of Cloutier et al and Uenoyama et al because doing so would enhance the throughput by allowing each of the plurality of the processing elements to perform concurrently multiple instructions; and thereby improve the performance of the operation speed of the multimedia processor.

16. As per claims 10 and 19, Cloutier et al. disclosed: wherein said DRAM stores audio data that is compressed in a standardized format (col. 11, lines 47-54; col. 13, lines 62-63), and further comprising means for decompressing said audio data that is compressed to generate uncompressed audio data and means for combining said full motion video data and said uncompressed audio data to generate full motion multimedia (col. 13, lines 45-54; col. 14, lines 66-67).

17. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al and Uenoyama et al in view of Ohki as applied to claims 1-10, 12-18 and 21 above, and further in view of Tam et al. (US Patent No. 5,754,186).

18. As per claims 11 and 20, the combination failed to disclose means for combining said storage locations to form a storage location that stores data that is larger than the predetermined physical sized of each storage location of the processing unit. However, Tam et al. means for combining said storage locations to form a storage location that stores data that is larger than the predetermined physical sized of each storage location (col. 3, lines 25-36). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the cited

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references because doing so would expand compressed pixel data stored in a storage location to a full width pixel data signal.

19. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cloutier et al and Uenoyama et al in view of Ohki as applied to claims 12-20 above, and further in view of Keene et al.

20. As per claim 22, the combination failed to disclose: wherein said compressed video data comprises a plurality of pixels and said processing means comprises means for combining a first pixel with a second pixel in a single clock cycle. However, Keene et al. disclosed the steps of combining a first pixel with a second pixel (col. 4, lines 54-59); but Keene did not specifically disclose that the combination has been performed in a single clock cycle. As well known in the computer art the clock of a computer is one of the prime determinants of its overall processing speed. Moreover, in computer graphics, the display cycle time is the minimum time interval between the starts of successive display cycles. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references because doing so would enhance the overall processing speed of the system by combining a first and a second pixel in one clock cycle.

21. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Normille et al (US Patent 5,212,742).

22. As per claim 24-25, Normille et al substantially disclosed the invention as claimed including a media processing system comprising: an arrangement configured to receive video data

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and control commands; a plurality of processors configured to process video data in response to control commands, a first arrangement to transport the control command to the plurality of processors; a second arrangement to transport portions of the data among plurality processors (col. 7, lines 50-56; col. 8, lines 20-23 and lines 34-37; Abstract, lines 2-6, 11-12).

Normille et al did not specifically disclose that the plurality of processors cooperate to produce full motion color image. However, Normille et al. did disclose the use of MPEG and JPEG in his system (col. 57-62). As well known to those of ordinary skill in this technology, MPEG processing provides compression coding of up to 30 frames per second of full motion video signals along with a corresponding high quality sound signal, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have realized that the MPEG taught by Normille et al. would provide a full motion color signal.

Response to Arguments

23. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman, can be reached on (703) 305-9798.

Any response to this action should be mailed to:

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va, Sixth Floor (Receptionist).

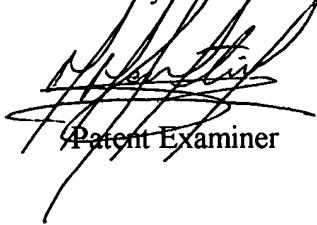
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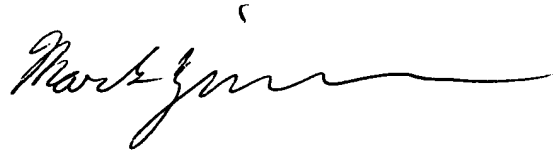
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime



Patent Examiner

March 28, 2002



MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600